DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

B2GL
Revision 22
CAMERON
A-105 A-180
A-120 A-210
A-140 A-250
A-160
BACARDI MIXER-100
CONE-105
FLAME-90
LIGHTBULB-100
MR. POTATO HEAD-90
January 22, 2004

TYPE CERTIFICATE DATA SHEET NO. B2GL

This data sheet, which is part of Type Certificate No. B2GL, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Cameron Balloons US
7399 Newman Boulevard
Dexter, MI 48130

I - Model A-105, Hot Air Balloon, Approved August 18, 1982

Envelope	Cameron envelope, Drawing CB115 or Drawing CBUS146E. Volume: 105,000 cu. ft.
Air Heaters	Any eligible Cameron double burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 2100 lbs., or to the weight requiring maximum continuous envelope temperature of 250^{O}F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature	1. Never exceed: 275^{O}F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250^{O}F. to 275^{O}F. 3. Maximum continuous: 250^{O}F.
Maximum Takeoff Altitude	18,000 ft. MSL
Minimum Crew	One (1) Pilot.
Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	5000 and up (see NOTE 4).

II - Model A-140, Hot Air Balloon, Approved August 18, 1982

Envelope	Cameron envelope, Drawing CB105. Volume: 140,000 cu. ft.
Air Heaters	Any eligible Cameron double burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 2800 lbs., or to the weight requiring maximum continuous envelope temperature of 250^{O}F., whichever is less. See Balloon Flight Manual.

Allowable Envelope Temperature	1. Never exceed: 275°F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250°F. to 275°F. 3. Maximum continuous: 250°F.
Maximum Takeoff Altitude	18,000 ft. MSL
Minimum Crew	One (1) Pilot.
Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	5000 and up (see NOTE 4).

III - Model A-210, Hot Air Balloon, Approved August 18, 1982

Envelope	Cameron envelope, Drawing CB199. Volume: 210,000 cu. ft.
Air Heaters	Any eligible Cameron double or triple or quadruple burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 4200 lbs., or to the weight requiring maximum continuous envelope temperature of 250°F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature	1. Never exceed: 275°F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250°F. to 275°F. 3. Maximum continuous: 250°F.
Maximum Takeoff Altitude	18,000 ft. MSL
Minimum Crew	One (1) Pilot.
Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. When triple burner with vapor pilot lights is used, either two Cameron Master and one Cameron Standard tanks or three Cameron Master tanks must be present. When triple burner with liquid pilot lights is used, three Cameron Master or Standard tanks must be present. When quadruple burner with vapor pilot lights is used, four Cameron Master tanks must be present. When quadruple burner with liquid pilot lights is used, four Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	5000 and up (see NOTE 4).

IV - Model A-120, Hot Air Balloon, Approved November 17, 1989

Envelope	Cameron envelope, Drawing CB617. Volume: 120,000 cu. ft.
Air Heaters	Any eligible Cameron double burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 2400 lbs., or to the weight requiring maximum continuous envelope temperature of 250°F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature	1. Never exceed: 275°F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250°F. to 275°F. 3. Maximum continuous: 250°F.

Maximum Takeoff Altitude	18,000 ft. MSL
Minimum Crew	One (1) Pilot.
Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	5000 and up (see NOTE 4).

V - Model A-160, Hot Air Balloon, Approved November 17, 1989

Envelope	Cameron envelope, Drawing CB653. Volume: 160,000 cu. ft.
Air Heaters	Any eligible Cameron double or triple burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 3200 lbs., or to the weight requiring maximum continuous envelope temperature of 250^{O}F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature	1. Never exceed: 275^{O}F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250^{O}F. to 275^{O}F. 3. Maximum continuous: 250^{O}F.
Maximum Takeoff Altitude	18,000 ft. MSL
Minimum Crew	One (1) Pilot.
Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. When triple burner with vapor pilot lights is used, either two Cameron Master and one Cameron Standard tanks or three Cameron Master tanks must be present. When triple burner with liquid pilot lights is used, three Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	5000 and up (see NOTE 4).

VI - Model A-180, Hot Air Balloon, Approved November 17, 1989

Envelope	Cameron envelope, Drawing CB692. Volume: 180,000 cu. ft.
Air Heaters	Any eligible Cameron double or triple burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 3600 lbs., or to the weight requiring maximum continuous envelope temperature of 250^{O}F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature	1. Never exceed: 275^{O}F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250^{O}F. to 275^{O}F. 3. Maximum continuous: 250^{O}F.
Maximum Takeoff Altitude	18,000 ft. MSL
Minimum Crew	One (1) Pilot.

Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. When triple burner with vapor pilot lights is used, either two Cameron Master and one Cameron Standard tanks or three Cameron Master tanks must be present. When triple burner with liquid pilot lights is used, three Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	5000 and up (see NOTE 4).

VII - Model A-250, Hot Air Balloon, Approved August 24, 1992

Envelope	Cameron envelope, Drawing CB463. Volume: 250,000 cu. ft.
Air Heaters	Any eligible Cameron double or triple or quadruple burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 5000 lbs., or to the weight requiring maximum continuous envelope temperature of 250^{O}F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature	1. Never exceed: 275^{O}F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250^{O}F. to 275^{O}F. 3. Maximum continuous: 250^{O}F.
Maximum Takeoff Altitude	18,000 ft. MSL
Minimum Crew	One (1) Pilot.
Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. When triple burner with vapor pilot lights is used, either two Cameron Master and one Cameron Standard tanks or three Cameron Master tanks must be present. When triple burner with liquid pilot lights is used, three Cameron Master or Standard tanks must be present. When quadruple burner with vapor pilot lights is used, four Cameron Master tanks must be present. When quadruple burner with liquid pilot lights is used, four Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	5000 and up (see NOTE 4).

VIII - Model FLAME-90, Hot Air Balloon, Approved September 7, 1993

Envelope	Cameron envelope, Drawing CB1034. Volume: 92,600 cu. ft.
Air Heaters	Any eligible Cameron double burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 1852 lbs., or to the weight requiring maximum continuous envelope temperature of 250^{O}F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature	1. Never exceed: 275^{O}F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250^{O}F. to 275^{O}F. 3. Maximum continuous: 250^{O}F.
Maximum Takeoff Altitude	18,000 ft. MSL
Minimum Crew	One (1) Pilot.

Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	5000 and up (see NOTE 4).

IX - Model LIGHTBULB-100, Hot Air Balloon, Approved April 12, 1996

Envelope	Cameron envelope, Drawing CB1121. Volume: 106,820 cu. ft. Lifting Volume: 100,000 cu. ft.
Air Heaters	Any eligible Cameron double burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 2000 lbs., or to the weight requiring maximum continuous envelope temperature of 250^{O}F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature	1. Never exceed: 275^{O}F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250^{O}F. to 275^{O}F. 3. Maximum continuous: 250^{O}F.
Maximum Takeoff Altitude	10,000 ft. MSL
Minimum Crew	One (1) Pilot.
Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	6008 and up (see NOTE 4).

X - Model CONE-105, Hot Air Balloon, Approved June 5, 2000

Envelope	Cameron envelope, Drawing CB1418. Volume: 120,000 cu. ft. Lifting Volume: 105,000 cu. ft.
Air Heaters	Any eligible Cameron double burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 2,100 lbs., or to the weight requiring maximum continuous envelope temperature of 250^{O}F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature	1. Never exceed: 275^{O}F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250^{O}F. to 275^{O}F. 3. Maximum continuous: 250^{O}F.
Maximum Takeoff Altitude	10,000 ft. MSL
Minimum Crew	One (1) Pilot.

Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	4794 and up (see NOTE 4).

XI - Model BACARDI MIXER-100, Hot Air Balloon, Approved July 14, 2000

Envelope	Cameron envelope, Drawing CB1420. Volume: 107,000 cu. ft. Lifting Volume: 100,000 cu. ft.
Air Heaters	Any eligible Cameron double burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 2,000 lbs., or to the weight requiring maximum continuous envelope temperature of 250^{O}F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature	1. Never exceed: 275^{O}F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250^{O}F. to 275^{O}F. 3. Maximum continuous: 250^{O}F.
Maximum Takeoff Altitude	10,000 ft. MSL
Minimum Crew	One (1) Pilot.
Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	4793 and up (see NOTE 4).

XII - Model MR. POTATO HEAD-90, Hot Air Balloon, Approved June 11, 2001

Envelope	Cameron envelope, Drawing CB1443. Volume: 125,000 cu. ft. Lifting Volume: 95,000 cu. ft.
Air Heaters	Any eligible Cameron double burner (see NOTE 10).
Baskets	Any eligible Cameron basket (see NOTE 9).
Fuel	Commercial LPG or propane
Maximum Weight	Gross weight limited to 1,800 lbs., or to the weight requiring maximum continuous envelope temperature of 250^{O}F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature	1. Never exceed: 275^{O}F. 2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250^{O}F. to 275^{O}F. 3. Maximum continuous: 250^{O}F.
Maximum Takeoff Altitude	10,000 ft. MSL
Minimum Crew	One (1) Pilot.

Fuel Capacity	When double burner with vapor pilot lights is used, two Cameron Master tanks must be present. When double burner with liquid pilot lights is used, two Cameron Master or Standard tanks must be present. Additional Cameron Master or Standard tanks may be carried as desired by pilot (see NOTE 8).
Serial Nos. Eligible	5000 and up (see NOTE 4).

Data Pertinent to All Models

Certification Basis	Part 31 of the Federal Aviation Regulations dated July 1, 1964, as amended by 31-1 and 31-4 inclusive. Application for Type Certificate dated March 16, 1982. Type Certificate No. B2GL issued August 18, 1982.
Production Basis	Production Certificate No. 327CE.
Equipment	In addition to the basic equipment required by the Certification Basis, the following equipment is also required: (1) Fire extinguisher rated at least 1A:10BC or 5B:C if Halon 1211. (2) Two sources of ignition (striker, matches or equal). (3) Protective helmets for pilot and passengers, if a flexible burner support system basket is operated or if a basket incorporating the FlexiRigid burner support system is operated without all FlexiRigid poles properly installed. (4) Leather gloves or equivalent for the pilot. (5) FAA Approved Balloon Flight Manual dated July 27, 1983 or later approved revision.
Maintenance and Inspection	Maintenance and Inspection of this Aircraft must be carried out according to the most recent publication of the Cameron Balloons US Instructions for Continued Airworthiness (original date of issuance: October 31, 1982).

NOTE 1. Reserved.

NOTE 2. Reserved.

NOTE 3. Reserved.

NOTE 4. Each hot air balloon envelope must have an individual registration number. An individual envelope is eligible for a Standard Airworthiness Certificate when mated with any approved combination of basket and burner assembly. Change to an eligible combination must be endorsed by logbook entry by the Pilot-in-Command or by a FAA Certificated Repairman.

NOTE 5. For the purpose of maintenance and inspection, operation records (logbooks) must be maintained with each hot air balloon envelope. If burner, basket, instruments, and/or tanks are interchanged, separate logbooks must be maintained for each component or group of components which are always used together. Fuel tanks must be inspected at least annually, and if tanks other than the serial numbers specified in the Flight Manual are to be used with the aircraft, the additional tanks must be inspected and noted in the Flight Manual by an FAA Certificated Repairman. The Flight Manual must be presented to an FAA Certificated Repair Station during annual inspections for verification of components being inspected.

NOTE 6. Instruments eligible for installation are listed in Cameron Balloon Parts and Materials List CB 1006.

NOTE 7. Inflated appendages on the envelope are permitted and approved as described in Drawing CBUS1016, Issue A, dated March 3, 1986, or later FAA approved revisions. Appendages must meet the same standards for strength as the balloon envelope. Appendages may be sewn onto the surface of the envelope per the seam style specified in Drawing CBUS1015.

NOTE 8. Eligible Cameron Master tanks:
P/N CB250 Master (10 gallon or 8 gallon capacity, each at 80 percent fill),
P/N CB497 when fitted with vapor outlet and regulator (10 gallon capacity, at 80 percent fill),
P/N CB599 when fitted with vapor outlet and regulator (11 gallon capacity, at 80 percent fill),
P/N CB2385 when fitted with vapor outlet and regulator (11 gallon capacity, at 80 percent fill),
P/N CB426 when fitted with vapor outlet and regulator (15 gallon capacity, at 85 percent fill),
P/N CB2380 when fitted with vapor outlet and regulator (15 gallon capacity, at 85 percent fill),
P/N CB2387 when fitted with vapor outlet and regulator (15 gallon capacity, at 85 percent fill),
P/N CBUS1050 when fitted with vapor outlet and regulator (15 gallon capacity, at 83 percent fill),
P/N CB959 when fitted with vapor outlet and regulator (20 gallon capacity, at 81.8 percent fill),
P/N CB2383 when fitted with vapor outlet and regulator (20 gallon capacity, at 81.8 percent fill),
P/N CBUS1060 when fitted with vapor outlet and regulator (20 gallon capacity, at 83 percent fill).

Eligible Cameron Standard tanks:
P/N CB250 Standard (10 gallon or 8 gallon capacity, each at 80 percent fill),
P/N CB497 when not fitted with vapor outlet and regulator (10 gallon capacity, at 80 percent fill),
P/N CB599 when not fitted with vapor outlet and regulator (11 gallon capacity, at 80 percent fill),
P/N CB2385 when not fitted with vapor outlet and regulator (11 gallon capacity, at 80 percent fill),
P/N CB426 when not fitted with vapor outlet and regulator (15 gallon capacity, at 85 percent fill),
P/N CB2380 when not fitted with vapor outlet and regulator (15 gallon capacity, at 85 percent fill),
P/N CB2387 when not fitted with vapor outlet and regulator (15 gallon capacity, at 85 percent fill),
P/N CBUS1050 when not fitted with vapor outlet and regulator (15 gallon capacity, at 83 percent fill),
P/N CB959 when not fitted with vapor outlet and regulator (20 gallon capacity, at 81.8 percent fill),
P/N CB2383 when not fitted with vapor outlet and regulator (20 gallon capacity, at 81.8 percent fill),
P/N CBUS1060 when not fitted with vapor outlet and regulator (20 gallon capacity, at 83 percent fill).

P/N CB426, CB497, CB599, CB2380, CB2387, and CBUS1050 tanks may be used only with baskets with Serial No. 8800 and up. P/N CB959, CB2383, and CBUS1060 tanks may be used only with basket part numbers CBUS301-5, CB302, CBUS302, CB302-1, CBUS302-1, CB302-2, CBUS302-2, CB302-3, CBUS302-3, CB302-4, CBUS302-4, CB754, CB755, CB860, CB862, CBUS1056, CB3004, CB3022, CB3042, CB3084, and CBUS3319 having Serial No. 9300 and up.

NOTE 9. Eligible Cameron baskets:
Any size specified in Drawing CB300, or Drawing CBUS300, or Drawing CB301, or Drawing CBUS301, or Drawing CBUS301-5, or Drawing CB301-7, or Drawing CBUS301-7, or Drawing CB301-8, or Drawing CB301-9, or Drawing CB302, or Drawing CBUS302, or Drawing CB302-1, or Drawing CBUS302-1, or Drawing CB302-2, or Drawing CBUS302-2 or Drawing CB302-3, or Drawing CBUS302-3, or Drawing CB302-4, or Drawing CBUS302-4, or Drawing CB310-1A, or Drawing CB310-2A, or Drawing CB310-3A, or Drawing CB310-4A, or Drawing CB310-5A, or Drawing CB754, or Drawing CB755, or Drawing CB860, or Drawing CB862, or Drawing CBUS1056, or Drawing CB3004, or Drawing CB3022, or Drawing CB3042, or Drawing CB3084, or Drawing CBUS3319*.

All baskets having at least one inner partition must be operated with all FlexiRigid poles properly installed.

* Basket CBUS3319 is limited to a Maximum Gross Weight of 3,200 lbs.

* When a wheelchair is carried on board basket CBUS3319, at least one functioning turning vent in the envelope is required for free flight.

NOTE 10.

Eligible Cameron single burners:	Drawings CB391, CBUS391, CB2130-1, CB2130-2.
Eligible Cameron double burners:	Drawings CB205, CB392, CBUS392, CB579, CBUS579, CB579-1, CB579-2, CB2075-1, CB2075-2, CB2059, CB2702, CB2832.
Eligible Cameron triple burners:	Drawings CB378, CB663-1, CB663-2, CB2081-1, CB2081-2, CB2703, CB2833.
Eligible Cameron quadruple burners:	Drawings CB616, CB2083-1, CB2083-2, CB2704, CB2834.

NOTE 11 Specific Envelope, Air Heater (Burner), Basket, and Fuel Tank Drawing Revision (Issue) Letters are not listed. Drawing Revision Letters are included on Air Heater, Basket, and Fuel Tank data plates, as well as being listed in the Aircraft log book and flight manual, to identify changes to the original drawing.

NOTE 12 Due to the similarity of design, certain baskets, burners and fuel cylinders manufactured by Thunder & Colt, may be used in conjunction with a Cameron Balloons envelope. This installation is subject to the operations and limitations given in the Model specific approved Cameron Balloons Flight Manual Supplement. The approved Model specific Flight Manual Supplement is required equipment and must be carried onboard the aircraft.

NOTE 13 Due to the similarity of design, certain baskets, burners and fuel cylinders manufactured by Lindstrand Balloons may be used in conjunction with a Cameron Balloons envelope. This installation is subject to the operations and limitations given in the Model specific approved Cameron Balloons Flight Manual Supplement. The approved Model specific Flight Manual Supplement is required equipment and must be carried onboard the aircraft.

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